DEPARTMENT OF COMMERCE BUREAU OF STANDARDS WASHINGTON

Letter Circular LC - 323

(April 7, 1932)

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STANDARDS AND SPECIFICATIONS FOR BUILDING MATERIALS

Listed herein are Commercial Standards, Simplified Practice Recommendations, and Federal Specifications for various kinds of building materials.

Copies of the printed Commercial Standards and Simplified Practice Recommendations may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. Copies of several of the publications not yet printed are available, without cost, in mimeograph form.

All of the Federal Specifications have recently been, or are now being, revised. They are listed herein under both their new classification symbols and their old numerical designations.

For many of these specifications there have been compiled lists of sources of supply of material guaranteed to comply with the specification requirements. These lists can be obtained without cost from the Bureau of Standards, Washington, D. C.

Copies of the Federal specifications which have been printed may be purchased from the Superintendent of Documents at 5 cents each with the exception of FF-H-101 (30 cents); SS-C-191 (10 cents) and WW-P-541 (15 cents). Information concerning copies of Federal Specifications not yet printed can be obtained from the Federal Specifications Board, Bureau of Standards, Washington, D. C.

An index of all current Federal Specifications, indicating the status of the specifications and showing the price of printed copies, will shortly be published as Section IV of the Federal Standard Stock Catalogue. Copies of this index may be purchased from the Superintendent of Documents, possibly at 10 cents each - the price of the earlier edition.

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COMMERCIAL STANDARDS FOR BUILDING MATERIALS

Below are listed commercial standards for various kinds of building materials. Lists of manufacturers willing to supply material guaranteed by them to comply with all of these standards have been compiled by the Bureau of Standards.

| | CS No. | Title | Price |
|---|--------|--|---------|
| | 0-30 | The Commercial Standards Service and Its Value to Business | 10¢ |
| | 4-29 | Staple Porcelain (All-Clay) Plumbing Fixtures | 10¢ |
| | 5-29 | Steel Pipe Nipples | 10¢ |
| | 6-31 | Wrought-Iron Pipe Nipples | |
| | 7–29 | Standard Weight Malleable Iron or Steel Screwed Unions | 5¢ |
| | 9-29 | Builders Template Hardware | 10¢ |
| • | 10-29 | Brass Pipe Nipples | |
| | 16-29 | Wall Paper | 5¢ |
| | 20-30 | Staple Vitreous China Plumbing Fixtures | 10¢ |
| | 22-30 | Builders ' Hardware (Nontemplate) | 10¢ |
| | 26-30 | Aromatic Red Cedar Closet Lining | |
| | 27-30 | Plate Glass Mirrors | 5¢ |
| | 28-32 | Cotton Fabric Tents, Tarpaulins and Covers | 10¢ |
| | 30-31 | Colors for Sanitary Ware (in preparation) | Mimeo.* |
| | 31-31 | Red Gedar Shingles | |
| | 35-31 | Plywood | 10¢ |
| | | | *** |

^{*}May be obtained from the Bureau of Standards in mimeographed form.

Note: Printed Pamphlets may be obtained for the price indicated from the Superintendent of Documents, Government Printing Office, Washington, D. C.

List of publications covering commonly used house-building materials, the manufacturers of which have adopted Simplified Practice Recommendations (SPR). These publications may be obtained at prices shown from the Superintendent of Documents, Government Printing Office, Washington, D. C.

| SPR | |
|--|---|
| No. | <u> Item</u> |
| 1-29 3-28 4 7 8-29 9-28 12 13-28 | Vitrified Paving Brick (seventh edition) |
| 14-28 16-29 19-28 21 25 26-30 | (second edition) |
| 28-29 29 30-28 32 38 | Sheet Steel (second edition) |
| 38 49 52 57 61-30 | Sidewalk lights |
| 78-28 82-28 83-28 87-29 94-30 | Iron and Steel Roofing 5¢ Hollow Metal Doors 5¢ Kalamein Doors 5¢ Forms for Concrete Joist Construction Floors 5¢ Open Web Steel Joists 5¢ Metal Partitions for Toilets and Showers |
| 106-30 109-29 111-30 121-31 122-31 RXI-28 | Hospital Plumbing Fixtures |
| , | Offers15¢ |

^{*} In process of revision.

^{**} May be obtained from the Bureau of Standards in mimeographed form.

BUILDING MATERIAL SPECIFICATIONS

Index of Federal Specifications for Building Materials arranged by Commodity Groups.

*Lists of willing-to-certify sources of supply have been compiled.

| Specification Symbol | <u> Title</u> | Original F.S.B. No |
|--|---|---------------------------------|
| , | ANIMAL PRODUCTS | |
| *C-F-201 C-G-451 | Felt; hair | - 158 |
| | CABLE AND WIRE | |
| *J-C-101 | Cable and Wire; rubber-covered (for) ordinary purposes | - 65 |
| | CHEMICALS | |
| *0-F-351 *0-F-355 | Fire Extinguishers; chemical, hand, carbon-tetrachloride type | - 124 |
| *0-F-380 | and acid type | - 213 - 36 |
| 6 | COAL-TAR AND PRODUCTS | |
| *R-P-351 *R-P-361 *R-T-101 *R-T-121 *R-T-131 *R-T-141 | Pitch; coal-tar, roofing | - 83 - 279 - 282 - 280 |
| * * | CORDAGE, TWINE, AND PRODUCTS | |
| *T-C-571 | Cord; sash, cotton, braided | - 528 |
| | ELECTRIC-APPARATUS | |
| *W-B-81 *W-B-101 W-F-101 W-F-391 | Bases; cut-out | - 58 |
| W-F-791 *W-F-801 *W-F-831 *W-L-101 | operated | - 176 |
| | tungsten-filament | - 23 |

Specification Symbol

Title

Original F.S.B. No.

METALS

| ୍ଦ୍ର−B-71 | Bars; reinforcement, concrete | 350 |
|-----------------|---|------------|
| *QQ-B-101 | Bases; metal; (for) plaster and stucco | |
| , | construction | 553 |
| QQ-F-451 | Flashings; metal (installation with | |
| | bituminous built-up roofing) | 156 |
| *QQ-L-201 | Lead; sheet | 308 |
| QQ-N-341 | Nickel-Steel; structural | 372 |
| રૂર-S−701 | Steel; staybolt (boiler) | 550 |
| QQ-S-721 | Steel; structural (for) buildings | 352 |
| *QQ-Z-301 | Zinc; plates, sheets, and strips | 531 |
| | | |
| | MINERALS AND PRODUCTS (non-metallic) | |
| | | |
| SS-A-676 | Asphalt; emulsion, quick-breaking-type | |
| ** . (< 7 | (for use in road work) | |
| SS-A-681 | Asphalt; emulsion, slow-breaking-type | |
| | (for use in road work) | |
| *SS-A-691 | Asphalt; (for) mineral-surfaced roofing | 84 |
| *SS-A-696 | Asphalt; petroleum, type PAF-1-25, (for) | |
| | joint-filler (squeegee or pouring) | |
| | me thod) | 277 |
| *SS-A-701 | Asphalt-Primer; (for) roofing and | ~ |
| *** | waterproofing | 87 |
| *SS-A-706 | Asphalt; (for use in) road and pavement | 0=(|
| 400 A 777 | construction | 276 |
| *SS-A-711 | Asphalt; (for) unsurfaced built-up | <i>α α</i> |
| *00 A 716 | roofingAsphalt; (for) waterproofing and damp- | 88 |
| *SS-A-716 | Asphait; (for) waterproofing and damp- | 85 |
| *SS-B-661 | proofingBrick; common, clay | |
| SS-B-663 | Brick; common, concrete | 504 |
| *SS-B-666 | Brick; common, sand-lime | 505 |
| SS-B-671 | Brick; paving | |
| SS-B-676 | Broken-Stone and Broken-Slag; (for) | |
| 00-D-010 | binder-course sheet-asphalt-pavement | 459 |
| SS-B-679 | Broken-Stone and Broken-Slag; (for) | 100 |
| | bituminous-concrete-base or surface- | |
| | Course | 458 |
| SS-B-682 | Broken-Stone and Broken-Slag; (for) | , ,,, |
| | bituminous-macadam-base or surface- | |
| 1 1 1 1 1 1 1 1 | Course | 457 |
| SS-B-685 | Broken-Stone and Broken-Slag (or) Gravel; | 101 |
| 00 B 00 J 1 | (for) bituminous surface-treatment | 455 |
| SS-B-688 | Broken-Stone and Broken-Slag; (for) |)) |
| 30 2 000 | waterbound base or wearing course | 456 |
| *SS-C-151 | Cement; asphalt, plastic | 380 |
| *SS-C-171 | Gement; magnesia, plastic (magnesia- | |
| | oxychloride) | 445 |
| *SS-C-181 | oxychloride) | 443 |
| | , | |

MINERALS AND PRODUCTS (non-metallic) (Continued)

| *SS-C-191 | Cement; Portland | 1 |
|-------------|--|--------|
| SS-C-571 | Coarse-Aggregate; (for) Portland cement- | |
| | concrete-pavement or base (crushed stone, | , |
| | gravel, or slag) | 4 |
| SS-C-621 | Concrete-Units; masonry, hollow | _ |
| SS-F-111 | Facings; foundry, carbon-base | |
| SS-F-351 | Fine-Aggregate; (for) Portland cement-concrete- | |
| | pavement or base (sand, etc.)46 | 4 |
| SS-F-451 | Flashings: plastic (installation with bituminous | |
| 20 1 1.72 | Flashings; plastic (installation with bituminous built-up roofing)15 | 7 |
| ss-G-651 | Granite-Blocks; recut granite, and durax | 1 |
| 00 0 0)1 | granite pavements 51 | 0 |
| *SS-G-901 | Gypsum; calcined24 | |
| _ | Lime; hydrated (for) structural purposes 24 | |
| *.SS-L-351 | Material at View and survive a survive at the | 7 |
| SS-M-51 | Materials; (for) cushion course, brick, stone- | |
| · · | block, or wood-block pavements (sand, slag, limestone, screenings, etc.)46 | |
| 00 16 03 | limestone, screenings, etc.) | り |
| SS-M-91 | Materials; (for) top-soil or sand-clay road surfaces | 0 |
| *** 1. 7. T | surfaces |)2 |
| SS-M-351 | Mineral-Filler; (for) sheet asphalt or asphaltic | |
| | concrete pavements (Portland cement, limestone | |
| , | dust and dolomite dust)46 | 3 |
| *SS-P-401 | Plaster; gypsum24 Plaster-Board; gypsum28 | 7 |
| *SS-P-431 | Plaster-Board; gypsum 28 | 5 |
| *SS-Q-351 | Quicklime; (for) structural purposes 25 | 50 |
| *SS-R-191 | Refractories: fire-clay, plastic35 | 5 |
| *SS-R-451 | Roof-Coating; asphalt, fibrous | 4 |
| *SS-R-501 | Roofing; asphalt, prepared21 | 4 |
| *SS-R-511 | Roofing; asphalt (and asbestos), prepared, | |
| | slate-surfaced 42 | 3 |
| *SS-R-521 | Roofing and Shingles; asphalt, prepared, slate- | |
| | surfaced29 | 16 |
| SS-R-551 | Roofing; built-up, type 3ACS (construction of)- 14 | |
| SS-R-554 | Roofing; built-up, type 3TCS (construction of)- 15 | |
| SS-R-557 | Roofing; built-up, type 410S (construction of)- 14 | |
| SS-R-560. | Roofing; built-up, type 4 AWS (construction of)- 14 | 1 |
| SS-R-563 | | |
| SS-R-566 | Roofing; built-up, type 4TCS (construction of) - 15 | 1 |
| SS-R-569 | Roofing; built-up, type 4TWS (construction of) - 15 | \cap |
| SS-R-572 | Roofing; built-up. type 5ACS (construction of) - 15 | 7 |
| | Roofing; built-up, type 5AWS (construction of)- 14 | 7 |
| SS-R-575 | Roofing; built-up, type 5TCS (construction of) - 15 | 2 |
| SS-R-578 | Roofing; built-up, type 5TWS (construction of) - 15 | 2 |
| ss-s-51 | Sand; (for) cement-mortar-bed, brick, stone- | 0 |
| 00 0 (3 | block or wood-block pavements 46 | 2 |
| SS-S-61 | Sand; (for) grout-filler, brick and stone-block | |
| ~~ ~ | pavements46 | 1 |
| SS-S-71 | pavements | |
| | concrete pavements 46 | 0 |
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MINERALS AND PRODUCTS (non-metallic) (Continued)

| \$\$-\$-721 *\$\$-\$-791 *\$\$-\$T-301 *\$\$-\$T-321 *\$\$-\$T-341 *\$\$-\$T-341 *\$\$-\$T-341 *\$\$-\$T-341 | Stone, architectural, cast | 508 506 507 284 444 |
|---|---|---------------------------------|
| <u>P.</u> | AINTS, PIGMENTS, VARNISHES AND PRODUCTS | |
| TT-B-601 TT-C-231 TT-C-236 | Boneblack; dry, paste-in-japan, paste-in-oil Chrome, green; oxide | · |
| TT-C-251 | Chrome, ore; ground | 125 |
| *TT-C-291 | Chrome, yellow; dry, paste-in-japan, paste-in-oil (lemon, medium, orange) | 476 |
| *TT-D-651 TT-E-521 | Drier; paint, liquid Enamel; pigmented (air-drying and baking), black | 20 |
| *TT-E-531 | Enamel; water-resisting, red | 66 |
| TT-L-71 *TT-0-111 *TT- P -31 | Lampblack; dry, paste-in-japan, paste-in-oil Ocher; dry, paste-in-japan, paste-in-oil Paints; iron-hydroxide and iron-oxide, ready- | 12 |
| r _ | mixed and semipaste | 13 |
| *TT-P-36 | Paints; lead-zinc base, ready-mixed and semi- paste, white and tinted | 10 |
| *TT-P-41 | Paints; lithopone, interior, flat and eggshell finish, ready-mixed and semipaste, light tints and white | |
| *TT-P-46 | Paints; lithopone, interior, gloss, light tints and white | 67 |
| *TT-P-61 | Paint; ready-mixed and semipaste, black | 14 15 |
| *TT-P-71 *TT-P-81 | Paints; ready-mixed and semipaste, green Paints; ready-mixed and semipaste, olive-drab | 137 |
| *TT-P-101 | Paints; titanium-zinc, outside, ready-mixed | 278 |
| TT-P-691 | and semipaste, white Prussian-Blue; dry, paste-in-japan, paste-in- oil | |
| *TT-P-791 | Putty | 283 11 |
| *TT-R-191 *TT-S-271 | Shellac; orange | 375 |
| *TT-T-271 *TT-T-291 | Thinner; paint (for) semipaste paints Thinner; paint, volatile mineral spirits | 17 16 |

PAINTS; PIGMENTS, VARNISHES AND PRODUCTS (Continued)

| TT-U-451 | Ultramarine-Blue; dry, paste-in-japan, paste-in-oil | | | |
|----------------------|---|---------------|-----|--|
| *TT-V-51 | Varnish; asphalt | 19 | | |
| *TT-V-71 | Varnish; interior | 22 | | |
| *TT-V-91 | Varnish; shellac | 376 | | |
| *TT-V-121 | Varnish; spar, water-resisting | ig | | |
| *TT-W-251 | White-Lead; basic-carbonate, dry, paste-in- | E | | |
| *TT-W-261 | oil, and semipaste-in-oil | . 5 | | |
| TT-W-556 | Wood-Preservative; coal-tar creosote (for) | - 6 | | |
| | ties and structural timbers | 395a-I | | |
| TT-W-561 | Wood-Preservative; creosote (for) brush and spray-treatment | 395a-I | II | |
| TT-W-566 | Wood Preservative; creosote-coal-tar-solution | | | |
| ጥጥ 10 57 1 | (for) ties and structural-timbers | 395a-I | | |
| TT-W-571 TT-W-576 | Wood-Preservative; preservative-treatment Wood-Preservative; zinc-chloride (for) ties | 395a-1 | | |
| 11-W-)/0 | and structural-timber | 395a-I | 77 | |
| *TT-Z-301 | Zinc-Oxide; dry and paste-in-oil | 8 | | |
| *TT-Z-321 | Zinc-Oxide; leaded, dry and paste-in-oil | 9 | | |
| | PETROLEUM AND PRODUCTS | | | |
| *VV-0-751 | Oil; road, type OH-1-25, hot application | 275 | | |
| PIPE, PIPE- | FITTINGS, PLUMBING-FIXTURES, TUBES, AND TUBING | (metal | lic | |
| *WW-C-571 | Conduit; enameled, rigid | . 7 77 | | |
| WW-N-351 | Nipples, pipe; brass, steel, and wrought-iron | 311 | | |
| *WW-P-351 | Pipe; brass, seamless, iron-pipe-size, | | | |
| | standard and extra-strong | 342 | | |
| *WW-P-371 | Pipe; concrete, plain | 495 | | |
| *WW-P-378 | Pipe and Tubing; copper, seamless; pipe | | | |
| • | (Standard, iron-pipe-size); tubing (for) | | | |
| | pressures up to 450 pounds per square inch) | 287 | | |
| *WW-P-401 | Pipe and Pipe-Fittings; soil, cast-iron | -11-7 | | |
| WW-P-421 | (coated and uncoated)Pipe; water, cast-iron (bell and spigot) | 343 | | |
| *WW-P-431 | Pipe; welded-steel, black and zinc-coated | 537 | | |
| *WW-P-441 | Pipe; wrought-iron, welded, black and | 102 | | |
| | galvanized | 242 | | |
| WW-P-448 | galvanizedPipe-Fittings; brass or bronze (threaded), | | | |
| *WW-P-451 | 125-1bPipe-Fittings; cast-iron (threaded) | 489 | | |
| *WW-P-471 | Pipe-Fittings; malleable-iron (threaded), | 707 | | |
| / - | 150-16 | 535 | | |
| WW-P-541 | 150-1b | 535 448 | | |
| *WW-T-721 | Tubes; boiler, iron, lapwelded, charcoal | 349 | | |
| | | | | |

PIPE, PIPE-FITTINGS, PLUMBING-FIXTURES, TUBES, AND TUBING (metallic)
(Continued)

| | (Continued) | |
|---|--|---------------------------|
| *WW-T-751 *WW-U-531 WW-U-536 | Tubes; boiler, steel, lapwelded and seamless Unions; malleable-iron or steel Unions; malleable-iron or steel, 300-lb | 34 7 393 580 |
| | RUBBER AND RUBBER-GOODS | |
| ZZ-H-451 ZZ-H-461 ZZ-M-71 | Hose; fire, cotton, rubber-lined Hose; gas Matting; rubber | 38 40 382 |
| | TEXTILES (yardage) | |
| cac-a-406 *aac-a-521 | Cloth; awningCloth; shade | 555 |
| | TEXTILE PRODUCTS | |
| *DDD-S-251 | Shades, window; rollers, slats, cords, and accessories | 367 |
| | TOOLS | |
| GGG-P-351 | Pipe Threads | 238 |
| | VEGETABLE PRODUCTS | |
| *JJJ-0-331 *JJJ-0-336 | Oil; linseed, boiledOil; linseed, raw | 475 |
| | WOOD PRODUCTS | |
| *LLL-C-571 *LLL-L-351 *LLL-L-361 *LLL-T-791 LLL-W-111 | Cork; compressed (cork board) | 337 209 210 7 |





